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## CHAPTER 169 INVESTIGATE A NEAR MID-AIR COLLISION

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### Section 1 Background

#### 1. WPMS ACTIVITY CODE: 1720

**3. OBJECTIVE.** The objective of this task is to perform a near mid-air collision (NMAC) investigation according to national and district office standards. Successful completion of this task may or may not result in a factual report that establishes the facts, conditions, and circumstances surrounding the NMAC. Completion of this task may also result in an enforcement action or the counseling of an airman.

#### 5. GENERAL.

A. **Definition.** A "Near Mid-Air Collision" is an incident associated with the operation of an aircraft in which a possibility of collision occurs as a result of proximity of less than 500 feet to another aircraft or where a report is received from a pilot or other flight crewmember stating that a collision hazard existed between two or more aircraft.

B. **Responsibilities.** The district office responsible for the NMAC investigation and report shall be:

(1) For air carrier aircraft, the Air Carrier District Office (ACDO) or Flight Standards District Office (FSDO) in whose area the incident occurred when an air carrier aircraft is involved.

(2) For other cases, the FSDO in whose area the incident occurred.

C. **FAA Investigator-In-Charge (IIC).** The assigned FAA IIC may request participation or documentation by other FAA divisions when deemed necessary.

(1) The FAA IIC will conduct the NMAC investigation, complete FAA Form 8020-15, and forward the final reports as described in Section 2, paragraph 5H of this chapter.

(2) The FAA IIC may need expertise by other offices (e.g., Medical, Security, etc.).

(3) The FAA IIC will determine the amount of participation needed by other of-

fices to obtain all relevant facts concerning the occurrence.

(4) All participants called in will contribute to the report.

**7. NMAC INVESTIGATIONS.** Investigations should be completed within 90 days. If a NMAC report is withdrawn by the originator of the preliminary report or the NMAC cannot be substantiated because of the inability to contact the originator, use FAA Form 8020-15 and provide a narrative statement to that effect in box H (CONCLUSIONS). The FAA IIC can usually conduct a NMAC investigation using the office telephone. When specific airman or aircraft data is required, it may be obtained from microfiche, ASAS, or a reputable and trusted operator (e.g., A & P, chief pilot, etc.).

A. **Initial Notification.** The FSDO receives telephone notification of the NMAC from an Air Traffic field facility or the Regional Operations Center (ROC). If written documentation is required from the AT facility, the FAA IIC may request that the AT facility provide a completed FAA Form 3556, NMAC Preliminary Report.

B. **Other Notification.** When the FAA IIC receives notification of a possible NMAC through direct contact with a flight crewmember, or the FAA IIC shall be responsible for notifying the nearest AT facility. The AT facility will then arrange for transmitting the operational priority message required. Investigation of the report shall be completed in accordance with the procedures in Section 2 of this chapter.

#### C. FAA Forms.

(1) FAA Form 3556, NMAC Preliminary Report, may be received at a FSDO as a result of several types of NMAC reporting. It may have been initiated by an AT facility after contact by a pilot or crewmember, or it may be used to transmit a Hazardous Air Traffic Report (HATR) or similar NMAC report received from the military.

(2) Investigation of NMAC Incidents, FAA Form 8020-15, should cover all factors involved in the incident. Include as an attachment to FAA Form 8020-15 copies of all related reports received from the AT facility.

(3) The investigation shall be coordinated with the AT facilities involved. Their findings and recommendations shall be considered in the investigation.

D. **Witness Statements.** When taking witness statements over the telephone use FAA Form 1360-33, Record of Visit, Conference, or Telephone.

E. **Pilot Deviations.** If the incident involves a pilot deviation and/or operational error, request that the reporting AT facility make a certified true copy of all pertinent AT communication tapes, flight progress strips, and radar printouts, if appropriate. These tapes should be sent to the district office as soon as possible so that the FAA IIC can utilize them for the investigation. These tapes will become a part of the final report.

F. **NASA Reports.** The pilot involved may have filed an Aviation Safety Reporting System (NASA) report regarding the NMAC. This may lead to a situation where the pilot involved may or may not want to make a personal statement about the incident, or the pilot may volunteer that a NASA report was filed. In either case, the FAA IIC should indicate in section H (CONCLUSIONS) if the pilot declined to make a personal statement. The FAA IIC should not request nor attempt to obtain this information from NASA. (Reference FAR § 91.57.)

G. **Categories.** The facts of an incident categorize it as either "Critical," "Potential," or "No Hazard." In situations defined as critical or potential, every effort should be employed to establish the identity of the aircraft involved before closing the file.

(1) **Critical:** A situation where collision avoidance was because of chance rather than an act on the part of the pilot. Less than 100 feet of aircraft separation would be considered critical.

(2) **Potential:** An incident which would probably have resulted in a collision if no action had been taken by either pilot. Proximity of 100 to 500 feet would usually be required in this case.

(3) **No Hazard:** When direction and altitude would have made a mid-air collision improbable regardless of evasive action taken.

H. **Investigation Of Incidents Involving Military Aircraft.** NMAC's involving military aircraft shall be investigated in by the FSDO in whose area it occurred, when:

(1) Obvious public safety is involved.

(2) The incident indicates possible violation of the FAR.

(3) The investigation and reporting of incidents shall follow the same guidelines as for civil incident investigations.

I. **Analysis Considerations.** During the documentation and investigation process certain evidence will require more detailed examination. The FAA IIC is continually evaluating evidence as a possible contributing factor or incident cause. The FAA IIC will utilize the procedure listed in related task #168, Section 1, paragraph 13 M, as a basis for forming an analysis.

**9. UPGRADING A NMAC TO AN INCIDENT.** If at any time during the investigation, facts are revealed which would indicate that the NMAC should be upgraded to an incident, the FAA IIC shall notify AVN-120, and the NTSB, if required, and the appropriate Air Traffic facility, following procedures in Related Task #167, Investigate An Incident.

## Section 2 Procedures

### 1. PREREQUISITES AND COORDINATION REQUIREMENTS.

A. **Prerequisites.** This task requires knowledge of any related FAR and FAA policies and qualification as an Aviation Safety Inspector (Operations).

B. **Coordination.** This task requires coordination with the district office clerical personnel, operations and airworthiness unit supervisors, the Regional Operations Center (ROC), and the appropriate Air Traffic Facility. This task may also require coordination with the Accident Prevention Program Manager (APPM) or the Safety Analysis Division, ASF-200; the appropriate National Transportation Safety Board (NTSB) Field Office; National Safety Data Branch, AVN-120; Regional Office of Public Affairs; Regional Counsel; operator's representative; or the Military Safety Center.

### 3. REFERENCES, FORMS, AND JOB AIDS.

#### A. References.

- Any affected FAR
- NTSB Part 830
- Airman Information Manual
- National and office policy specific to accident/incident investigation
- Order 1200.23, Public Availability of Information
- Order 2150.3, Compliance and Enforcement
- Order 7110.65, Air Traffic Control
- Order 8020.11, Aircraft Accident and Incident Notification, Investigation, and Reporting (most current edition)
- Order 8700.1, General Aviation Operations Inspector's Handbook
- Any office duty book/procedures

#### B. Forms.

- FAA Form 1360-33, Record of Visit, Conference, or Telephone Call
- FAA Form 3556, Near Mid-Air Collision Preliminary Report
- FAA Form 8020-15, Investigation of Near Mid-Air Collision Incident

#### C. Job Aids.

- Sample letters and figures
- Special emphasis forms as required by GENOTS, Notices, or National Policy
- Duty book

### 5. PROCEDURES.

A. **Initial Notification.** (See Related Task #166, Perform Telephone Standby.) Record initial NMAC information using Accident/Incident Report Job Aid, Figure 169-1 or 169-2.

(1) If notification is made by an Air Traffic (AT) Facility, verify that the AT facility has initiated:

- (a) An FAA Form 3556 (Figure 169-3)
- (b) The appropriate notification procedures

(2) Request from the reporting AT Facility the following:

- (a) Flight progress strips
- (b) ATC tapes
- (c) Radar printouts
- (d) Weather information

(3) If the AT facility has not initiated an FAA Form 3556, request that the form be submitted.

(4) If notification is made by a source other than an AT facility, notify the following:

- (a) The responsible AT Facility, preferably a Flight Service Station and verify that

the appropriate notification procedures will be initiated.

(b) The district office manager or the appropriate office representative, in accordance with district office policies, that a near mid-air collision (NMAC) has occurred.

(c) The Regional Operations Center (ROC), if required.

(d) National Transportation Safety Board (NTSB), if required.

(e) Contact the responsible AT facility and request that certified true copies of the following be submitted:

- (i) Flight progress strips
- (ii) ATC tapes
- (iii) Radar printouts
- (iv) Weather information

(5) If the incident involves an operational error and/or deviation, determine if the AT facility is going to submit an FAA Form 8020-11. (Figure 169-4)

(a) If the AT facility indicates that an FAA Form 8020-11 will not be submitted, terminate the task.

(b) If the AT facility indicates that an FAA Form 8020-11 will be submitted, make required notifications.

(6) Review reports.

B. **WPMS.** Open WPMS file.

C. **Review AT Facility Reports.** Upon receipt of the requested forms and reports:

- (1) Review for statistical data:
  - (a) Location of occurrence
  - (b) Time of occurrence
  - (c) Weather conditions at time of occurrence
  - (d) The reported separation distance.

(2) Determine the N-number of each aircraft involved using the information provided by the reporting AT facility and witness, flight crewmember, and passenger statements.

(a) If unable to identify all of the N-number's of the aircraft involved:

- (i) Notify unit supervisor.
- (ii) Terminate the task.

(b) If one or more of the N-number's can be identified, determine involved parties of each of the aircraft at the time of the occurrence.

D. **Determine the Involved Parties.** Using the identified N-number's and district office policy, contact Oklahoma City to determine the owners of each involved aircraft.

(1) If a privately owned aircraft, contact the owner for identification of pilot at the time of NMAC.

(2) If commercial aircraft contact chief pilot or director of flight operations for names of the flight crewmembers.

(3) Consideration shall be given to company operation procedures.

E. **Contact the Involved Parties and Witnesses.**

(1) Contact each of the owners and/or pilots for a statement regarding the NMAC. Record all pertinent information concerning the witness, including the witness' name, address, and a telephone number for future contact. Document the date and time of the occurrence and request a written statement, if required and the witness is willing.

- (2) Obtain crewmember statements.
- (3) Obtain passenger statements.
- (4) Obtain any witness statements.
- (5) Obtain other information.

(6) Obtain supporting data (e.g., aircraft, pilot, weather, etc.)

(7) If AT personnel or facilities are involved, request comments.